

July 2015

## Wabaunsee County

### Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors

A total of 13 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Wabaunsee County economy.<sup>1</sup> These 13 sectors have a total direct output of approximately \$147 million and support 707.8 jobs in Wabaunsee County. Running the model for all 13 sectors simultaneously produces the following results:

**Agriculture Contribution in Wabaunsee County**

Impact Type <sup>2</sup>	Employment	% of Total Employment	Total Value Added <sup>3</sup>	% of Gross Regional Product <sup>4</sup>	Output <sup>5</sup>	% of Gross Regional Product
Direct Effect	707.8	26%	\$46,420,178	32%	\$147,100,566	101%
Indirect Effect	89.2	3%	\$5,014,110	3%	\$11,167,788	8%
Induced Effect	36.8	1%	\$2,790,546	2%	\$4,959,440	3%
Total Effect	833.8	31%	\$54,224,835	37%	\$163,227,794	112%

As shown in the above table, agriculture, food, and food processing supports 833.8 jobs, or 31% of the entire workforce in the county. These industries provide a total economic contribution of approximately \$163 million, roughly 112% of Gross Region Product (GRP). As noted below in the calculation of Gross Regional Product, imports and institutional sales are subtracted. Therefore, counties that import a relatively large amount of goods and services will have a reduced GRP which may lead to agricultural output being greater than GRP.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 13 agriculture, food, and food processing sectors is approximately \$54 million, or 37% of the GRP. This indicates that personal income, business income, and taxes generated by these sectors account for 37% of the total economy.

The following tables document the overall summary numbers of the model, top industries affected by employment and output, and a listing of all industries that were analyzed.

<sup>1</sup> Article on building a contribution analysis in IMPLAN that avoids double counting:  
[https://implan.com/index.php?option=com\\_content&view=category&id=19](https://implan.com/index.php?option=com_content&view=category&id=19)

<sup>2</sup> Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

<sup>3</sup> Value Added = Labor Income + Indirect Business Taxes + Other Property Type Income

<sup>4</sup> GRP = Final Demand of Households + Governments Expenditures + Capital + Exports - Imports - Institutional Sales

<sup>5</sup> Output = Intermediate Inputs + Value Added

In the top ten by employment, Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming is the top employer in the agriculture industry with 259.0 employees. This table also shows the amount of jobs that are created by the agriculture industry in Wabaunsee County.

#### Top 10 Industries Affected by Employment

Sector Description:	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming .....	259.0	\$41,930,902
All other crop farming.....	147.8	\$11,719,255
Dairy cattle and milk production .....	104.2	\$12,121,014
Canned fruits and vegetables manufacturing.....	73.9	\$36,814,804
Grain farming .....	46.5	\$10,177,878
Meat processed from carcasses .....	36.5	\$17,312,865
Truck transportation.....	19.8	\$2,146,177
Wholesale trade.....	15.2	\$2,869,141
Monetary authorities and depository credit intermediation .....	11.0	\$1,678,509
Landscape and horticultural services .....	10.1	\$602,591

The Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming industry directly contributes approximately \$42 million to Wabaunsee County's economy. This table also shows how much revenue is generated in other industries by having a strong agriculture industry.

#### Top 10 Industries Affected by Output

Sector Description:	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming .....	259.0	\$41,930,902
Canned fruits and vegetables manufacturing.....	73.9	\$36,814,804
Meat processed from carcasses .....	36.5	\$17,312,865
Dairy cattle and milk production .....	104.2	\$12,121,014
All other crop farming.....	147.8	\$11,719,255
Oilseed farming.....	8.0	\$10,837,051
Grain farming .....	46.5	\$10,177,878
Animal, except poultry, slaughtering.....	6.6	\$4,133,232
Wholesale trade.....	15.2	\$2,869,141
Truck transportation.....	19.8	\$2,146,177

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture sector and the output they contributed to Wabaunsee County's economy.

[illegible]

All 105 counties in Kansas have IMPLAN models with an agriculture contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Kansas, the retail sector was omitted.